

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010881**Date Inspected:** 28-Dec-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wang Chung Ging**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** TOWER / OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TRIAL ASSEMBLY YARD**ULTRASONIC INSPECTION****OBG SEGMENT 5AW-5BW**

This Quality Assurance (QA) Inspector performed conventional UT (Ultrasonic Testing) in conjunction with ABF UT department for detection of planar transverse indication. Ultrasonic Inspection (UT) performed on repair areas of bottom panel splice weld between OBG segment 5AW and 5BW (OBW5A-003) utilizing scanning pattern A, B, C and D (Fig 6.7). During the ultrasonic inspection this Quality Assurance (QA) Inspector found 1 transverse indication that had not identified by ABF.

See Caltrans Ultrasonic Transverse Indication Evaluation sheet dated 12/28/2009 for further information on inspections.

OBG SEGMENT 5CW-5BW

This Quality Assurance (QA) Inspector performed conventional UT (Ultrasonic Testing) in conjunction with ABF

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UT department for detection of planar transverse indication. Ultrasonic Inspection (UT) performed on repair areas of side panel (cross beam side) splice weld between OBG segment 5BW and 5CW (OBW5A-009) utilizing scanning pattern A, B, C and D (Fig 6.7)

No relevant indication observed.

MAGNETIC PARTICLE INSPECTION

OBG SEGMENT 5BW-5CW

This Quality Assurance (QA) Inspector performed Magnetic Particle Inspection in conjunction with ABF Magnetic Particle Inspection department. Magnetic Particle Inspection was performed on repair areas of the side panel (cross beam side) splice weld between OBG segment 5BW and 5CW (OBW5A-009). During the magnetic particle inspection ABF found four linear indications on temporary attachment removed area near the weld OBW5A-009. The lengths and 'Y' locations of indications as below. ABF request number 12282009-1.

Y location	Length of indication
1. 7010mm	80mm
2. 5350mm	70mm
3. 4920mm	30mm
4. 4510mm	25mm

For additional information see attached photos

BAY # 10

This QA Inspector randomly observed the following work in progress.

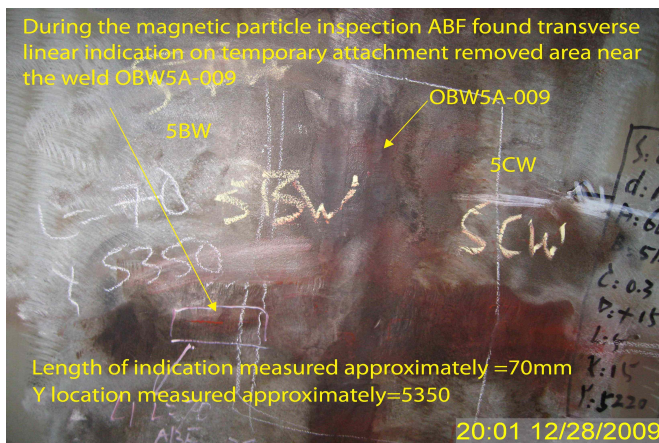
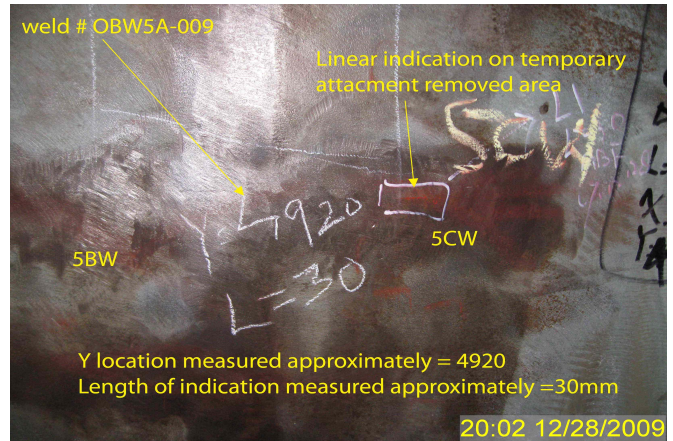
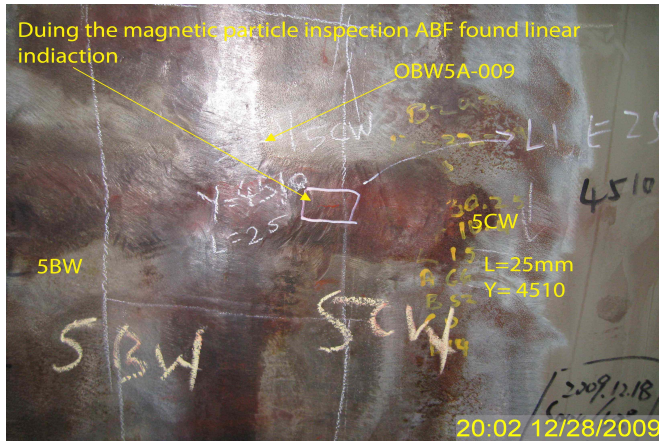
SOUTH TOWER LIFT # 4

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 201825 performing Flux Cored Arc Welding process for weld SSTL-1C/L-62 located on PCMK double diaphragm 119m of South tower lift 4. ZPMC QC Mr. Wang Chung Ging monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer